

Transportation Fund for Clean Air (TFCA) Regional Fund

Guidance and Application Workshop

for Shuttle/Feeder Bus Service and Regional Ridesharing Projects



Application Workshop Agenda

- Introduction to Air District and TFCA Program
- Review of Guidance:
 - Overview of TFCA Regional Fund Policies
 - Evaluation Criteria
 - ➤ Eligible TFCA Costs
 - Application Submittal
 - Insurance Requirements
- Application Instructions
- Helpful Hints
- Timeline
- Q&A



Bay Area Air Quality Management District (Air District)

NINE COUNTY JURISDICTION OF THE BAAQMD



- Established in 1955
- 9 Counties
- 7 million residents
- 5,340 square miles
- Mission: To protect and improve public health, air quality, and the global climate



Transportation Fund for Clean Air (TFCA) Regional Fund

- \$4 surcharge on motor vehicle registrations
- Regional Fund (60% allocated directly by Air District)
 - Shuttles and ridesharing
 - Electronic bicycle lockers (e-lockers)
 - Other eligible project types later this year
- County Program Manager Fund (40% allocated by Congestion Management Agencies)
 - > Shuttle and ridesharing projects
 - Variety of other project types



FYE 2015 - Shuttle/Feeder Bus Service and Regional Ridesharing Program

- Funding Availability: \$4 Million
- Eligible Applicants: Only public agencies
- Applications due by

August 11, 2014, 4 PM

Board resolutions may be submitted after the due date, but no later than **September 15, 2014**



FYE 2015 Guidance, Policies, and Evaluation Criteria



Appendix A: FYE 2015 Policies – Overview

Projects must comply with Board-adopted Policies

- General and project type-specific Policies
- Shuttle/feeder bus service Policies: #27 and #28
- Regional Ridesharing Policy: #29





Appendix A: Summary of Changes for FYE 2105

- Shuttle/Feeder Bus Requirement Clarifications (Policy #27)
 Explicit definition of duplication, inclusion of language that specifies that service must be open to the public.
- Shuttle/Feeder Bus New Requirement (Policy #27)
 All applicants must provide a 5-year plan for financing the service.
- Pilot Shuttle Feeder Bus New Requirements (Policy #28)
 All applicants must provide a 5-year plan for financing the service and a letter from the local transit agency that demonstrates the applicant has attempted to coordinate service.
- Changes to Cost-effectiveness (C/E) Limits (Policy #2, #27, and #28)
 Changes to the C/E limits for Pilot Shuttle/Feeder bus services in CARE
 Areas and PDAs and increases the C/E limits of both Existing and Pilot
 Shuttle/Feeder bus services.
- Regional Fund Evaluation Criteria Changes
 CARE Area map was updated and expanded to include Episodic Areas.



Appendix A: Shuttle/Feeder Bus Service (#27)

- Route connects passengers from a <u>mass transit hub</u> (e.g., rail or Bus Rapid Transit (BRT) station, ferry or bus terminal or airport) to a distinct <u>commercial</u> or <u>employment</u> area
- Proposed Service <u>cannot</u> duplicate existing service.
- If an applicant is <u>not a transit agency or district</u>, it <u>must</u> provide documentation to demonstrate that the proposed service does not duplicate or conflict with existing service
- Grant funding may only be used to pay for commuter peak-hour service (5 AM – 10 AM and/or 3 PM – 7 PM)
- Cost effectiveness limit = \$125,000
 (Policy 2)





Appendix A: Duplication Definition

27.d: The project may not duplicate existing local transit service or service that existed along the project's route within the last three years. "Duplication" of service means...

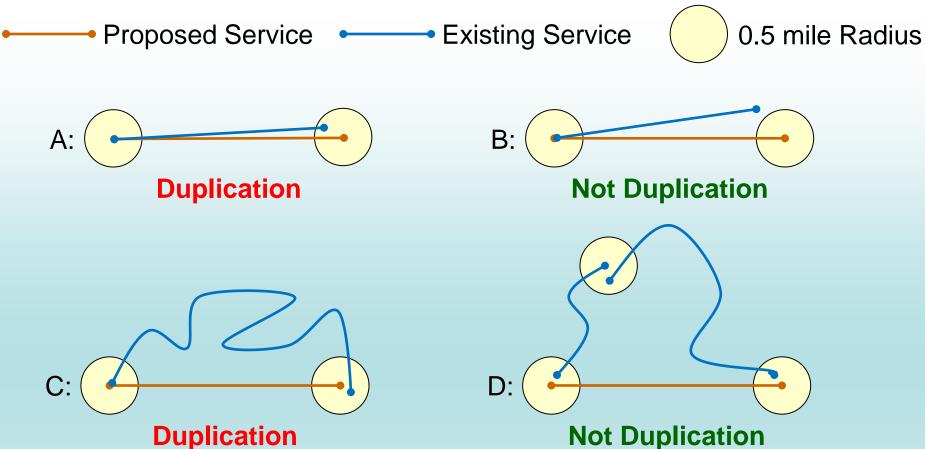
...establishing a shuttle route where there is an <u>existing transit</u> <u>service stop within 0.5 miles</u> of the commercial hub or business center and that can be <u>reached by pedestrians in 20 minutes or less</u>.

Projects that propose to **increase service frequency** to an area that has existing service may be considered for funding if the increased frequency would reduce the commuter's **average transit wait time to thirty minutes or less.**

* Waiver for projects funded in FYE 2014 cycle may request an exemption from the requirements of Policy 27. D



Appendix A: Duplication Examples





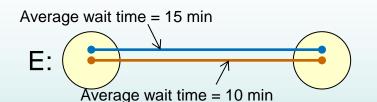
Appendix A: Duplication Examples, cont.



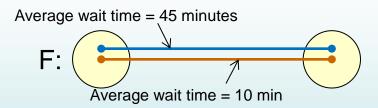
Existing Service



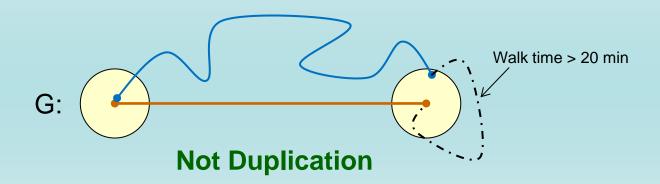
0.5 mile Radius



Duplication



Not Duplication





Appendix A: Pilot Shuttle/Feeder Bus (#28)

- Defined as a route that is at least 70% unique
- Applicant must provide documentation to support the need for new service and a plan for financing the service in the future
- Cost Effectiveness Limits:

	In CARE areas or PDAs	All Other Projets
Year 1	\$500,000/ton	\$200,000/ton
Year 2	\$200,000/ton	\$125,000/ton
Year 3	\$125,000/ton	-

 Must comply with all other applicable requirements in Policy #27



Appendix A: Regional Ridesharing (#29)

- For services that facilitate trip reduction (e.g., maintaining a ridesharing/carpooling website)
- Projects must be comprised of riders from <u>at least five</u> Bay Area counties
- No one county may account for more than <u>80%</u> of all riders
- Cost effectiveness limit = \$90,000 (Policy 2)





Appendix A: Cost Effectiveness (#2)

CE =
$$\frac{\text{TFCA \$ awarded}}{\text{Tons of NO}_x + \text{ROG} + (\text{PM}_{10}^*20) \text{ reduced}}$$

Cost Effectiveness: Ratio of TFCA funds awarded divided by the total tons of reactive organic gases (ROG), oxides of nitrogen (NO_x), and weighted particulate matter (PM_{10}) reduced over project useful life.



Appendix A: Cost Effectiveness Calculation

LHD)

CO2 Factor

(g/mi)

(gr/yr)

1.840

ROG

Emissions

(gr/yr)

5,700

Total Annual VM

(sum all vehicles

(gr/yr)

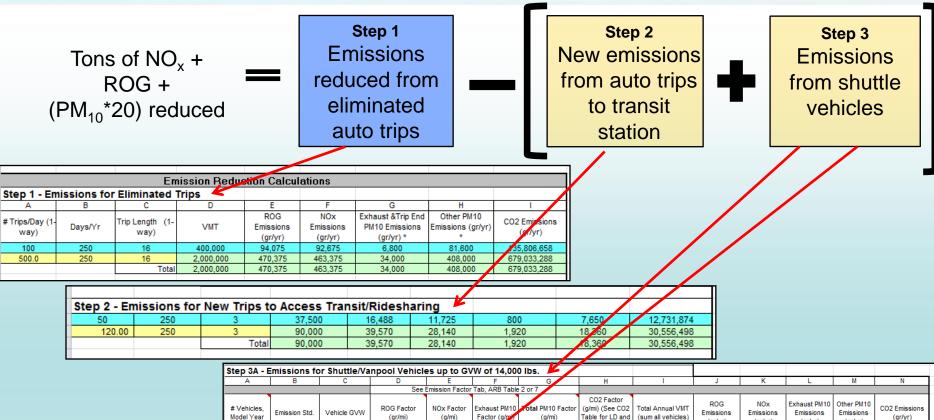
NOx

Emissions

(gr/yr)

22,200

22,200



See Emission Factors Tab, Emissions for Buses Table

Exhaust PM10

Factor (g/mi)

Other PM10 Factor

ROG Factor

NOx Factor

BAAQMD Application Workshop

Step 3B - Emissions for Buses

Engine Year.

Retrofit Device

CO2 Emissions

(gr/yr)

(gr/yr)

Other PM10

Emissions

(gr/yr)

4,170

(gr/yr)

Exhaust PM10

Emissions

(gr/yr)

981



Vehicle Effect on Cost Effectiveness (2010 Diesel)

FYE 2014	TFCA Regio	nal Fund Wo	rksheet	Regional F	und Proj. #:			# Years Effectiveness:		1
/ersion 1.0, up	dated 2/6/14			F	Route Name:			Total Project Cost		\$350,000
								TFCA	Cost 40%:	
Calculatio	ns Tab: Con	nplete areas s	haded in yello	ow only.				TFCA	Cost 60%:	\$250,000
	IES ARE SHOWN			1				Total	TFCA Cost:	\$250,000
		Em	ission Redu	ction Calcul	lations					
Step 1 - Er	nissions for	Eliminated								
Α	В	С	D	E	F	G	Н	I		
# Trips/Day (1 way)	Days/Yr	Trip Length (1- way)	VMT	ROG Emissions (gr/yr)	NOx Emissions (qr/yr)	Exhaust &Trip End PM10 Emissions (gr/yr) *	Other PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)		
100	250	16	400,000	94,075	92,675	6,800	81,600	135,806,658		
500.0	250	16	2,000,000	470,375	463,375	34,000	408,000	679,033,288		
		Total	2,000,000	470,375	463,375	34,000	408,000	679,033,288		
Stop 2 - Er	niccione for	New Trips to	Access Tra	neit/Dideeb	aring					
50 50	250	New Imps to	37,500	16,488	11,725	800	7,650	12,731,874		
120.00	250	3	90,000	39,570	28,140	1,920	18,360	30,556,498		
120.00	200	Total	90,000	39,570	28,140	1,920	18,360	30,556,498		
	missions fo									
A	В	С	D	E Con Eminaian En	F	G sions for Buses Table	Н	1	J	K
	•		-	See Emission Fa	Clors Tab, Emiss	IONS TOT DUSES TABLE	; 		[
# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	ROG Factor (gr/mi)	NOx Factor (g/mi)	Exhaust PM10 Factor (g/mi)	Other PM10 Factor (g/mi)	CO2 Factor (g/mi)	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emission (gr/yr)
1	2010 Diesel	n/a	0.19	0.74	0.03	0.139		30000	5,700	22,200
							Total	30,000	5,700	22,200
"	5									
	tiveness Re	sults				Annual	Lifetime			
. VMT Reduce						1,880,000				
. Trips Reduc						95,000	95,000			
. ROG Emissi				-		0.47		Tons		
. NOx Emission						0.46		Tons		
. PM Emission						0.46		Tons		
	d Emissions Redu	iced				1.11	1.11	Tons		
. CO2 Emissio	ns Reduced					714.8	714.8	Tons		
3. Emission Re	ductions (ROG, N	NOx & PM)				1.38		Tons		
). TFCA Projec	t Cost - Cost Effe	ectiveness (ROG,	Nox & PM)				\$100,1	/Ton		
0 TECA Pro	piect Cost - Co	st Effectiveness	(ROG, NOx & W	eighted PM)	THIS VALUE	MUST MEET	\$122,780	Fon		

2010 Diesel: \$122,780/ton



Vehicle Effect on Cost Effectiveness (2007 Diesel)

RIDESHARING, BICYCLE, SHUTTLE, AND SMART GROWTH PROJECTS Cost Effectiveness Inputs **FYE 2014 TFCA Regional Fund Worksheet** Regional Fund Proj. #: # Years Effectiveness: Route Name: Total Project Cost Version 1.0, updated 2/6/14 \$350,000 TFCA Cost 40%: Calculations Tab: Complete areas shaded in yellow only. TFCA Cost 60%: \$250,000 Total TFCA Cost: SAMPLE ENTRIES ARE SHOWN IN LIGHT BLUE \$250,000 **Emission Reduction Calculations** Step 1 - Emissions for Eliminated Trips G Н ROG NOx Exhaust &Trip End Other PM10 # Trips/Day (1 CO2 Emissions Trip Length (1-Days/Yr VMT **Emissions** Emissions PM10 Emissions Emissions (gr/yr) (gr/yr) way) way) (gr/yr) (gr/yr) (gr/yr) * 100 250 400.000 94.075 92.675 6.800 81,600 135 806 658 500.0 250 16 2,000,000 470.375 463,375 34,000 408,000 679,033,288 2,000,000 470,375 463,375 408,000 679,033,288 34,000 Step 2 - Emissions for New Trips to Access Transit/Ridesharing 16,488 7,650 12,731,874 11,725 39,570 28,140 1,920 18,360 30,556,498 Total 90.000 39.570 28,140 1,920 18,360 30.556,498 Step 3B - Emissions for Buses Н See Emission Factors Tab. Emissions for Buses Table ROG NOx Retrofit Device ROG Factor NOx Factor Exhaust PM10 Other PM10 Factor CO2 Factor Total Annual VMT Engine Year, # Vehicles Emissions Emissions (sum all vehicles) (gr/mi) (g/mi) Factor (g/mi) (g/mi) (g/mi) (gr/yr) (qr/yr) 007 Diesel n/a 0.23 4.01 0.03 0.139 6,900 120,300 Total 30.000 6.900 120.300 Cost Effectiveness Results Annual Lifetime 1. VMT Reduced 1,880,000 Miles 1,880,000 95.000 Trips 3 2. Trips Reduced 95.000 0.47 0.47 Tons 3. ROG Emissions Reduced) 4. NOx Emissions Reduced 0.35 0.35 Tons 1 5. PM Emissions Reduced 0.46 0.46 Tons 1.11 Tons 1.11 2 6. PM Weighted Emissions Reduced 3 7. CO2 Emissions Reduced 714.8 714.8 Tons 1.27 1.27 Tons 1 8. Emission Reductions (ROG, NOx & PM) 9. TFCA Project Cost - Cost Effectiveness (ROG, Nox & PM) \$196,230 /Ton 10. TFCA Project Cost - Cost Effectiveness (ROG, NOx & Weighted PM). THIS VALUE MUST MEET \$129,755 /Ton POLICY REQUIREMENTS

2010 Diesel: \$122,780/ton

2007 Diesel: \$129,755/ton



Vehicle Effect on Cost Effectiveness (2003 Diesel)

FYE 2014 T	2014 TFCA Regional Fund Worksheet Region		Regional F	egional Fund Proj. #:			# Years Effectiveness:		1	
Version 1.0, upd	lated 2/6/14			F	Route Name:			Total P	roject Cost	\$350,000
								TFCA	Cost 40%:	
Calculation	s Tab: Con	nplete areas s	haded in vello	ow only				TFCA Cost 60%:		\$250,000
		IN LIGHT BLUE							TFCA Cost:	\$250,000
										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		Fr	ission Redu	ction Calcu	latione					
Sten 1 - Em	issions for	Eliminated		Cuon Carca	Idions					
A	B	C	D	E	F	G	Н	1		
				ROG	NOx	Exhaust &Trip End	Other PM10			
# Trips/Day (1-	Days/Yr	Trip Length (1-	VMT	Emissions	Emissions	PM10 Emissions	Emissions (gr/yr)	CO2 Emissions		
way)	-	way)		(gr/yr)	(gr/yr)	(gr/yr) *	*	(gr/yr)		
100	250	16	400,000	94,075	92,675	6,800	81,600	135,806,658		
500.0	250	16	2,000,000	470,375	463,375	34,000	408,000	679,033,288		
		Total	2,000,000	470,375	463,375	34,000	408,000	679,033,288		
					<u> </u>					
		New Trips to								
50	250	3	37,500	16,488	11,725	800	7,650	12,731,874		
120.00	250	3	90,000	39,570	28,140	1,920	18,360	30,556,498		
		Total	90,000	39,570	28,140	1,920	18,360	30,556,498		
Step 3B - F	missions fo	or Buses								
A	В	С	D	Е	F	G	Н	I	J	K
			5	See Emission Fa	ctors Tab, Emiss	sions for Buses Table				
									ROG	NOx
# Vehicles	Engine Year,	Retrofit Device	ROG Factor	NOx Factor	Exhaust PM10		CO2 Factor	Total Annual VMT	Emissions	Emission
	make, & idedel	Name	(gr/mi)	(g/mi)	Factor (g/mi)	(g/mi)	(g/mi)	(sum all vehicles)	(gr/yr)	(gr/yr
1	2003 Diesel	n/a	0.27	11.64	0.25	0.139		30000	8.100	349.20
							Total	30,000	8,100	349,20
Cost Effecti	iveness Re	sults				Annual	Lifetime			
1. VMT Reduced	d					1,880,000	1,880,000	Miles		
2. Trips Reduce	d					95,000	95,000	Trips		
3. ROG Emission						0.47		Tons		
4. NOx Emission						0.09		Tons		
5. PM Emissions						0.45		Tons		
	Emissions Redu	icad				0.43		Tons		
7. CO2 Emission		ICCU				714.8	714.8			
	uctions (ROG, N	IOv & PM)				1.01		Tons		
		ectiveness (ROG,	Nov & PM\			1.01	\$246,5.6	/Ton		
o. II CA FIUJECL	COST - COST ETT	CUIVEIICSS (RUG,	NUA & FIII)				\$240,04	71011		

2010 Diesel: \$122,780/ton

2007 Diesel: \$129,755/ton

2003 Diesel: \$163,659/ton



Appendix A: Evaluation Criteria (pg. 10)

60% of funding available is reserved for:

- Projects in Highly Impacted Communities or Episodic Areas as defined in the Air District Community Air Risk Evaluation (CARE) Program
- Priority Development Areas



Appendix B: Eligible TFCA Costs

- Project Implementation Costs charges associated with implementing a TFCA-funded project
 - Documented hourly labor charges related to implementation of TFCA project
 - Equipment maintenance costs
 - Shuttle operation costs
 - Contractor labor charges related to TFCA project
 - Indirect project implementation costs
- Administrative Project Costs costs associated with administration of the TFCA grant funding
 - Costs associated with administrating the TFCA Funding Agreement
 - Accounting for TFCA funds
 - Fulfilling monitoring, reporting, and record-keeping requirements
 - Indirect administrative costs associated with administrating the project



Application Submittal Instructions

- Fill out and submit the online application, AND
- Submit one (1) hard copy of the completed, printed-out online application and supporting documentation to:

Karen M. Schkolnick District Grant Programs Manager Strategic Incentives Division Bay Area Air Quality Management District 939 Ellis Street; San Francisco, CA 94109



Appendix D: Insurance Requirements

Project Type	Insurance Required
Operation of Shuttles and Vanpools	 Commercial General Liability Automobile Liability Automobile Physical Damage Workers Compensation
Other Ridesharing Operations	Commercial General Liability



Grant Application Instructions

Shuttle/Feeder Bus Service & Regional Ridesharing Projects



Online Application Part 1: Summary Information & Schedule

Shuttle/Feeder Bus Projects
Page: 1 2 3 4 5
Save my progress and resume later Resume a previously saved form
PART 1. SUMMARY INFORMATION
BAY AREA GRANT APPLICATION TFCA REGIONAL FUND PROGRAM SHUTTLE/FEEDER BUS PROJECTS FYE 2015
NOTE: This application will work best using Google Chrome or Mozilla Firefox browsers.
Legal Name of Applicant Organization *
Name of Project ② *
Total Project Cost (\$) ② 0
Total TFCA Regional Funding Requested (\$) @ 0
Mailing Address:
Street or P.O. Box Address *
City *
County * Please select ▼



Application Part 2: Detailed Information

Provide a project badget below, broken out by operation and administrative costs (for TFCA Regional Funds) and operation costs only (for Matching Funds). Any other costs should be excluded from the project budget. If match funding is derived from more than a single source, specify each funding source and the amount of match funds on a separate line. TFCA Regional Funds Line Item Operating costs for matching funds only							
TFCA Regional Funds Line Item	Estimated Cost (\$)	Source					
Item Shuttle Operation		TFCA Regional Funds					
Item Administrative		TFCA Regional Funds					
Total TFCA Regional Funds for Route (\$) 0.00							
Matching Funds Line Item † (if necessary, add additional lines)							
Matching Funds Line Item Estip	ated Cost (\$) Source						
Item Shuttle Operation		Add line item					



Application Part 2: Uploads

UPLOAD:

Map of Route 2 * Choose File No file chosen

Schedule of Route (2) Choose File No file chosen

NOTE: the Project scope must include peak-hour operations only, as defined by Policy #27. Highlight the sections of the schedule to be included in the scope of the Project.





Application Part 2: Highly Impacted Communities

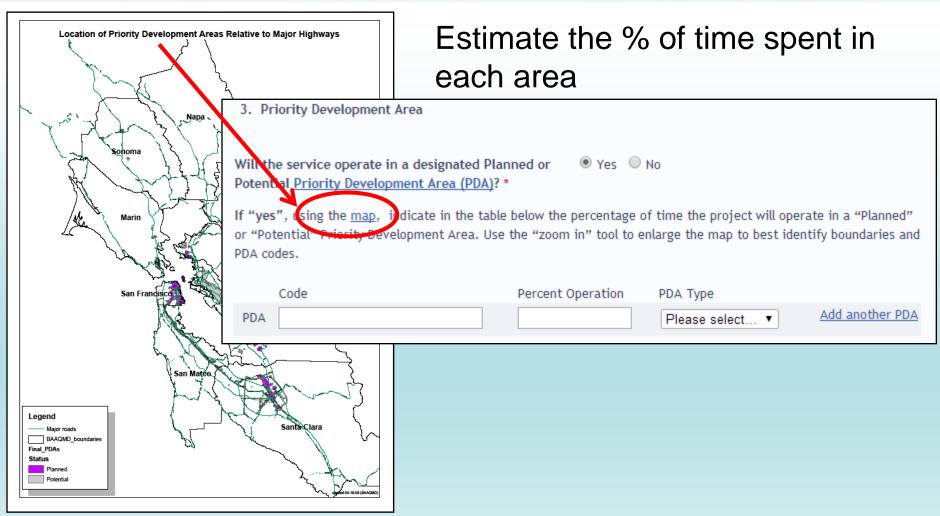
Estimate the % of time spent in each zone

Will the service operate in a Bay Area Hig	hly Impacted Community? * • Yes	○ No		
If "yes", using his <u>map</u> or this <u>online map</u> . Highly Impacted Community area. Use the				
Zone #	Percent Operation	m 376 m 137 m	Valle 8. Vallejo	y sta
1 Concord	0	MARIL		int
2 Richmond/San Pablo	0	San Rafael 7. Sa Greenbrae	Rafael 2. Richmond/San Park	ord Brentwood
3 Western Alameda County	0	Belv	yedere 531 m Berkeley	644 m
4 San Jose	0		6. Eastern San Francisco 3. Western Alar	meda County
5 Livermore	0	Daly City	Salu Hayward	5. Livermore
6 Eastern San Francisco	0		Burlingame 8	680
7 San Rafael	0	El Granada	San Fremont Carlos East Palo Alto	Victory of the second
8 Vallejo	0	1	Stanford Milpitas Sunnyval	1169 m
9 Antioch/Pittsburg	0		677 m Santa 325 m 849 m Clàra 28	4. San Jose
Total (Maximum 100%)	0.00		565 m	

Antioch 9. Antioch/F



Application Part 2: Priority Development Areas





Application Part 2: ADA requirement, additional routes

All routes must meet the requirements of the Americans with Disabilities Act:

5. The proposed project (shuttle service) is included in the applicant's federallyapproved paratransit plan, prepared in accordance with the requirements of the
Americans with Disabilities Act. *

ADD ANOTHER ROUTE

For projects with multiple routes, click
here to add additional routes.



Application Part 3: Checklist

_	All shuttle/feeder bus projects:
	Documentation for all matching funds that will be applied to the project. A sign Print out and check boxes submittal of the application identifying the individual
	author zeu to submit and carry out the proposat.
	Printed raw survey data (exported in an Excel spreadsheet).
[Document showing methodology for all calculations used, including assumptions and equations.
[Documents for each vehicle that will be providing service including
	☐ 1) A copy of the vehicle's current Department of Motor Vehicle (DMV) registration,
	2) Executive Order for engine, and
	3) Executive Order of retrofit device, if applicable.
[A map and schedule for each service route.
[Documentation that the project complies with TFCA Policy #27 if the applicant is not a transit agency (see Appendix A
i	n Grant Application Guidance).
	n addition:
	Existing shuttle/feeder bus projects:
L	Data showing ridership for the past three (3) years.
	Pilot shuttle/feeder bus projects:
_	Documentation showing demand for the service including letters of support from potential users and providers.
	A description of plans for self-financing/funding this service in future years. Include letters of support from potential
·	users and financial supporters.



Application Part 4: Certification & Survey

PART 4. CERTIFICATION AND SURVEY
Applicant must read and initial each item below to indicate understanding and agreement:
I understand that this application is for evaluation purp Print out and initial funding.
I certify that the proposed project and the emission of ductions that would be realized from it are not required by any federal, state or local regulation, judicial order, agreement, memorandum of understanding, contract, mitigation requirement, or other binding obligation that leggives the project applicant to implement any portion of the project. Initial:
I certify that all matching funds have been disclosed and that this application is for service, equipment/ vehicle(s)/ engine(s) that neither have been dready been funded, nor are currently under consideration for funding by another air district, the California Air Resources Board (ARB) or by another public agency. Initial:
I certify that to the best of my knowledge, the information contained in this application and in any documentation accompanying this application or submitted in furtherance of this application is true and accurate and I understand that any misstatements or omissions of material facts may disqualify this grant application and any monies awarded based on it. Initial:
I certify, to the best of my knowledge, that the Project complies with all vehicular and service requirements for fixed route systems, demand responsive systems, or other designated public transportation that are prescribed in (Titles II and III of) the Americans with Disabilities Act (42 U.S.C. 12101 et seq.) and its accompanying regulations and are applicable to the Project. Initial:
I understand and agree that no costs funded by this program can be incurred until after the notice of award <u>and</u> after a funding agreement is executed between the project sponsor (grantee) and the Air District. Initial:



Helpful Hints

- Project provides service using the best available and cleanest technology vehicle(s)
- Applicant requests relatively few grant funds for the Project
- Shuttle route is relatively short in distance and provides service to a relatively large % of riders that otherwise would have driven alone



Timeline

- August 11, 2014 Applications due date
- August 12, 2014 Air District begins review of applications
- September 15, 2014 Board resolutions due date
- Awards over \$100,000 will be considered by the Board on:
 - > October 2014 (tentative) Mobile Source Committee
 - > November 2014 (tentative) Board of Directors
- Mid-November 2014 (tentative) Funding agreements generated



Project Timeline

Project Timing

- Projects <u>must</u> start in CY 2015 (may not begin until funding agreement is executed)
- Maximum of two years of operating funds (for projects requesting up to \$100,0000)

Payment / Invoicing

- Interim Payments on a quarterly reimbursement basis
- Final Payment after receipt and approval of Final Report

Monitoring and Reporting

- Progress reports due semi-annually every April 15 and October 15
- Final report due 3 months after project completion
- Survey Requirement, see project schedule

Project Closeout

Project closeout occurs after final payment

Audit and Inspection

Projects funded by TFCA are subject to independent audit and inspection



Contact Information

Shuttle/Feeder Bus & Ridesharing Projects:

Ken Mak, Administrative Analyst kmak@baaqmd.gov (415) 749-8660

TFCA Program Updates:

www.baaqmd.gov/tfcaregional

http://www.baaqmd.gov/Divisions/Strategic-Incentives/Alternative-Transportation/Shuttles-and-Ridesharing.aspx



QUESTIONS?

